

Activity: **9.4**
Conduct Acceptance Test

Responsibility: Acceptance Test Team

Description: Acceptance of a delivered software product is the ultimate objective of a software development project. Acceptance testing is used to demonstrate the software product's compliance with the system owner's requirements and acceptance criteria.

At the system owner's discretion, acceptance testing may be performed by the project team, by the system owner and users with support from the project team, or by an independent verification and validation team. Whenever possible, users should participate in acceptance testing to assure that the software product meets the users' needs and expectations. All acceptance test activities should be coordinated with the system owner, user(s), operations staff, and other affected organizations.

Acceptance testing is conducted in the production environment using acceptance test data and test procedures established in the Acceptance Test Plan. Testing is designed to determine whether the software product meets functional, performance, and operational requirements. If acceptance testing is conducted on an incremental release basis, the testing for each release should focus on the capabilities of the new release while verifying the correct operation of the requirements incorporated in the previous release.

Acceptance testing usually covers the same requirements as the system test. Acceptance testing may cover additional requirements that are unique to the operational environment. The results of each test should be recorded and included as part of the project test documentation.

Subject the test environment to strict, formal configuration control to maintain the stability of the test environment and to assure the validity of all tests. Review the acceptance test environment, including the test procedures and their sequence, with the system owner and user before starting any tests.

Testing is complete when all tests have been executed correctly. If one or more tests fail, problems are documented, corrected, and retested. If the failure is significant, the acceptance test process may be halted until the problem is corrected.

Work Product: Prepare a formal Acceptance Test Report. Summarize the test procedures executed, any problems detected and corrected, and the projected schedule for correcting any open problem reports. Place a copy of all acceptance test materials in the Project Test File.

Review Process: Conduct an Operational Readiness Review at the completion of acceptance testing. This review is a combined quality assurance and configuration management activity. It focuses on the results of the acceptance test and the readiness of the software product to go into production.

During the Operational Readiness Review examine acceptance test results with the system owner and user. Document any problems, determine solutions to the problems, and implement action plans. Once any problems associated with the acceptance test are resolved, the software product is ready for formal acceptance by the system owner.

A successful Operational Readiness Review establishes the operational baseline for the software product. The baseline consists of the software product and the technical documentation that describes the operational software and its characteristics.